

#### 5.4 FORMATION MULTI-TEST (FMT) ANALYSIS

A segregated sample was attempted at 2105.5 mBRT. The sample was required to aid in identifying the formation fluid. The 10 litre clean-up chamber was drained at the wellsite, and the 4 litre PVT sealed for laboratory analysis.

Following are details of the fluid samples:

A.	Sample Chamber:	10 litres, serial #1900ZD-331991
	Sample depth:	2105.5 mBRT
	Sample temperature:	71.25 °C
	Drawdown pressure:	2197 psia
	Flowing pressure:	2473 psia
	Final sample pressure:	2945.5 psia
	Time to fill:	114 seconds

Recovery :

Opening pressure:	nil
Fluid volume:	9.3 litres
Gas volume:	nil
Fluid description:	Cloudy water, probably mixture of mud filtrate and formation water.
Resistivity of sample:	0.0913 OHMM at 17.5 °C

The resistivity of the fluid sample corrected to borehole temperature correspond to 0.034 OHMM at 82 °C, which is an intermediate value between the formation resistivity of 0.04 OHMM and the mud filtrate resistivity of 0.024 OHMM both at 82 °C.

No further analysis performed at the wellsite. Sample retained.

B.	PVT Sample Chamber:	4 litres, serial #1900ZC-331581
	Sample depth:	2105.5 mBRT
	Sample temperature:	71.25 °C
	Drawdown pressure:	2098 psia
	Flowing Pressure:	2500 psia approx.
	Final sample pressure:	2947.5 psia
	Time to fill:	36 seconds

The sample was sealed for laboratory analysis. Flowline pressure to chamber was 600 psig.

Results from the PVT-analysis of water sample :

Flash of reservoir fluid to stock tank conditions. Flash conditions 300 bar and 20 °C to atmosphere and 20 °C.

Gas water ratio:	2.2 Sm <sup>3</sup> /Sm <sup>3</sup>
Density of water:	1043.7 Kg/Sm <sup>3</sup> (15 °C)
Gas gravity (air=1):	0.5956

# Mud Properties, daily record

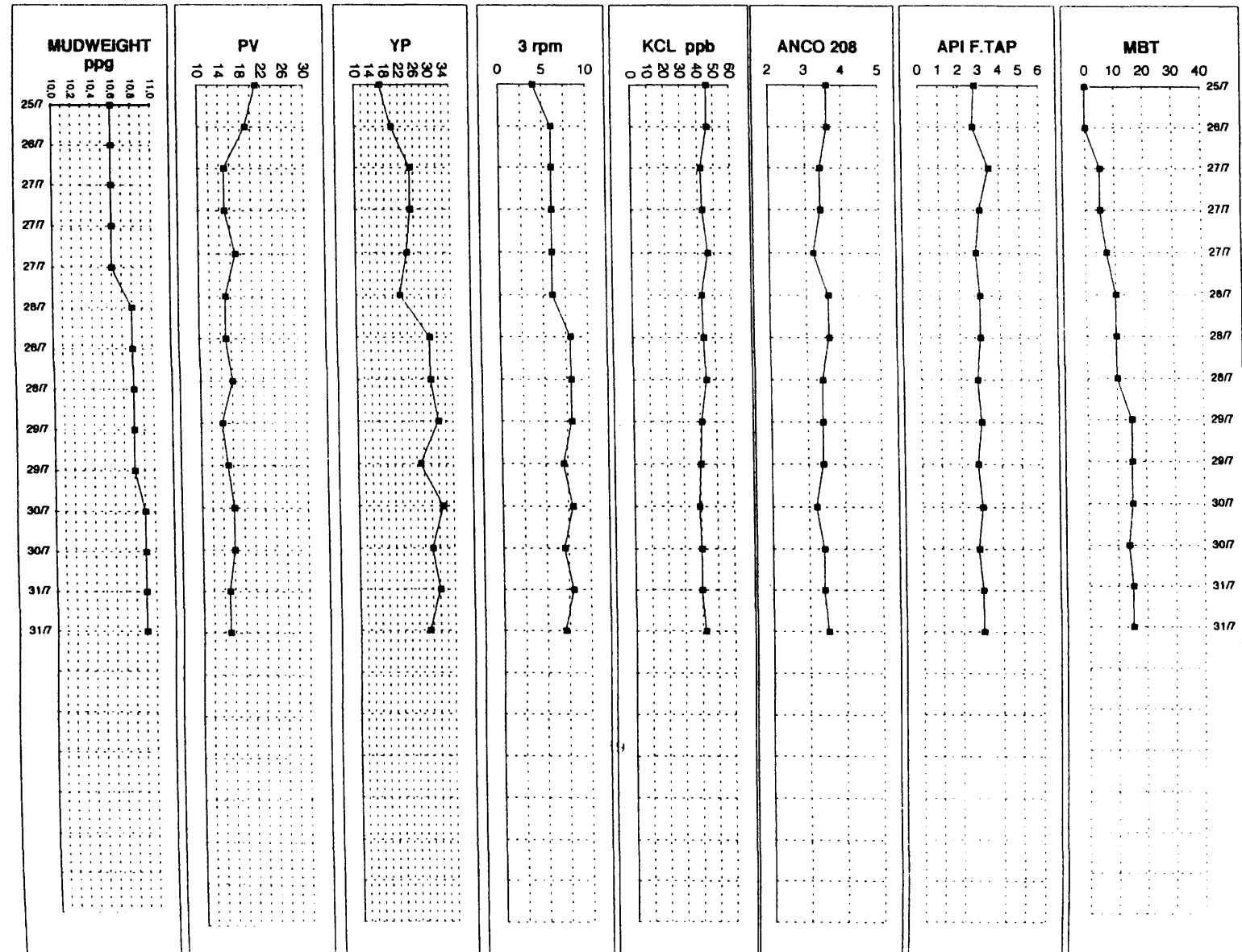
Well: 25/8-7

Operator: Amerada Hess

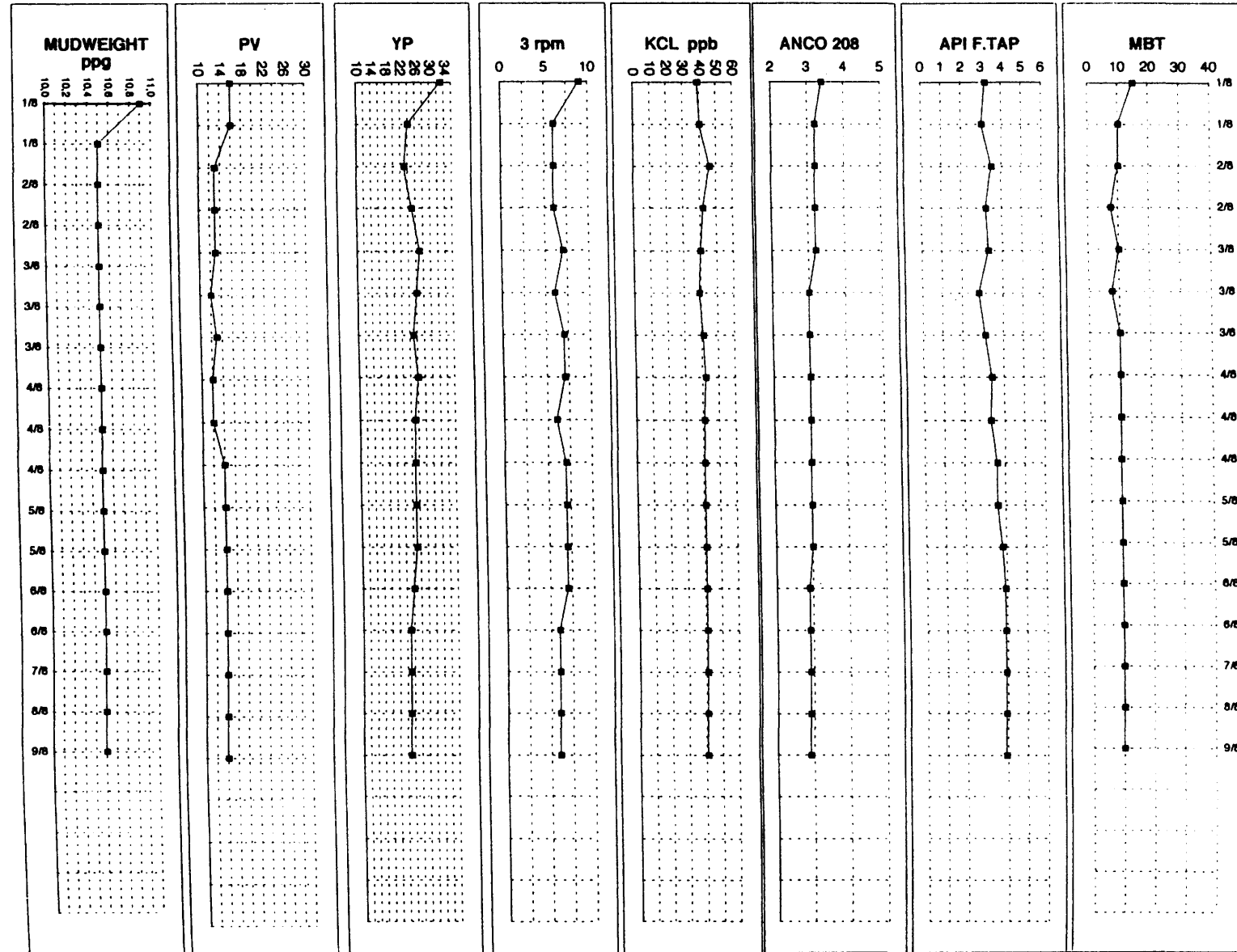
Anchor Drilling Fluids

FSR no.	Date	Depth	M.W.	F.Vis	VG-meter readings @ 50 C						A.V.	P.V.	Y.P.	Gel 10s	Gel 10 m	pH	API	HTHP	Cl-	Pf	Mf	Ca++Solids	Oil	Sand	MBT	KCL	HGS	LGS	Anco	
.	.	m	ppg	s/qt.	600 rpm	300 rpm	200 rpm	100 rpm	6 rpm	3 rpm	cP	cP	lb/100	lb/100	lb/100	.	ml	ml	mg/l	ml	ml	mg/l	vol%	vol%	vol%	ppb	ppb	ppb	%	
<b>36 1/2" Section: Bentonite/Seawater Mud.</b>																														
1	21-07	221	8,90	100+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2	22-07	225	8,90	100+	45	40	-	-	-	-	22,5	5	35,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	23-07	1070	8,90	100+	45	40	-	-	-	-	22,5	5	35,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4	24-07	1004	8,90	100+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>12 1/4" Section: Anco 2000 Mud</b>																														
5	25-07	1070	10,60	78	59	38	29	20	5	4	29,5	21	17,0	4,0	6,0	8,7	2,8	-	67000	0,1	0,70	160	5,8	0	0,0	0	46		3,3	
6	26-07	1070	10,60	72	58	39	30	20	7	6	29,0	19	20,0	6,0	7,0	8,8	2,7	-	67000	0,1	0,60	160	5,8	0	0,0	0	46	88		3,2
7	27-07	1235	10,60	62	58	41	33	25	9	6	29,0	17	24,0	6,0	8,0	9,0	2,8	-	66000	0,3	0,90	400	7,3	0	0,3	7	45	68	25	3,2
8	28-07	1855	10,80	49	62	46	41	31	10	8	31,0	16	30,0	8,0	12,0	8,4	2,8	-	70000	0,0	0,30	540	8,7	0	0,5	10	44	73	34	3,4
9	29-07	2010	10,80	49	57	42	35	28	9	7	28,5	15	27,0	8,0	12,0	8,4	2,9	-	71000	0,0	0,30	600	8,7	0	0,5	15	40	71	35	3,4
10	30-07	2010	10,90	52	62	46	40	30	10	7	31,0	16	30,0	8,0	11,0	8,4	2,8	-	71000	0,0	0,20	640	8,7	0	0,5	13	40	80	29	3,4
11	31-07	2010	10,90	50	59	44	39	29	10	7	29,5	15	29,0	7,0	11,0	8,3	3,0	-	71000	0,0	0,25	600	9,1	0	0,5	15	42	75	37	3,5
<b>8 1/2" Section: Anco 2000 Mud</b>																														
12	01-08	2042	10,50	46	56	40	33	25	9	6	28,0	16	24,0	6,0	8,0	8,4	3,0	11,0	68000	0,1	0,50	560	6,6	0	0,3	10	40	67	18	3,2
13	02-08	2059	10,50	49	51	38	31	24	8	6	25,5	13	25,0	7,0	9,0	8,5	3,2	12,0	73000	0,1	0,40	520	6,2	0	0,2	7,5	42	66	16	3,2
14	03-08	2186	10,50	49	51	38	35	26	10	7	25,5	13	25,0	8,0	12,0	8,5	3,1	13,0	70000	0,1	0,30	600	7,6	0	0,2	10,0	41	51	38	3,0
15	04-08	2319	10,50	46	53	39	34	26	9	7	26,5	14	12,5	7,0	14,0	8,2	3,6	13,2	72000	0,0	0,40	760	7,5	0	0,2	10,0	41	50	37	3,0
16	05-08	2341	10,50	46	53	39	34	25	9	7	26,5	14	12,5	7,0	12,0	8,2	3,8	13,2	72000	0,0	0,40	760	7,5	0	0,2	10,0	41	50	37	3,0
17	06-08	2380	10,50	46	51	37	32	24	9	6	25,5	14	11,5	7,0	11,0	8,2	3,9	13,4	72000	0,0	0,40	720	7,5	0	0,3	10,0	41	50	37	2,9
18	07-08	2380	10,50	47	51	37	32	24	9	6	25,5	14	11,5	7,0	11,0	8,2	3,9	13,4	72000	0,0	0,40	720	7,5	0	0,3	10,0	41	50	37	2,9
19	08-08	2380	10,50	47	51	37	32	24	9	6	25,5	14	11,5	7,0	11,0	8,2	3,9	13,4	72000	0,0	0,40	720	7,5	0	0,3	10,0	41	50	37	2,9
20	09-08	P&A	10,50	47	50	36	30	21	8	5	25,0	14	11,0	6,0	10,0	9,4	5,2		69000	0,4	1,00	1020	7,5	0	0,3	10,0	39	50	37	2,8

AMERADA HESS 25/8-7  
12 1/4" SECTION  
MUD PROPERTIES



AMERADA HESS 25/8-7  
8 1/2" SECTION  
MUD PROPERTIES



# Geochemical Report for Well NOCS 25/8-7

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## Chapter 1

# INTRODUCTION

### 1.1 General Information

This report concerns the geochemical analysis of cuttings, conventional core and sidewall core samples from well NOCS 25/8-7, which was spudded by Amerada Hess Norge in July 1995, and which lies north-east of the Balder Field and south-east of the Heimdal field on the western flank of the Utsira High (Figure 1). The water depth was 123 m and the RT at 25 m.a.s.l. All depths quoted are relative to RT unless otherwise specified.

All samples were supplied by Amerada Hess Norge. The condition of the canned cuttings was generally good, apart from one can which had been loosely sealed, this however being from a non-critical section of the well.

The well was drilled using a glycol-based drilling mud, which has strongly affected many of the geochemical results, mainly those however involving the thermal extraction technique.

The analytical program was selected on a progressive basis with the agreement of Amerada Hess Norge at each stage, who also supplied the formation top data which is used in this report.

## 1.2 Analytical Program

<u>Analysis type</u>	<u>No of samples</u>	<u>Figures</u>	<u>Tables</u>
Headspace and occluded gas	64	2a-c	1
$\delta^{13}\text{C}$ Headspace gas (C1 - C4)	11	3a-b	2
Lithology description	74	4-9	3
TOC	56	4	4
Rock-Eval pyrolysis	56	5-9	4
Thermal extraction GC (GHM, S <sub>1</sub> )	28	10a-h	
Pyrolysis GC (GHM, S <sub>2</sub> )	28	11a-g,12	5
Soxhlet Extraction of organic matter	11		6a-d
MPLC/HPLC separation	11		6a-d
Saturated hydrocarbon GC	11	13a-g	7
Aromatic hydrocarbon GC	11	14a-h	8a-b
Vitrinite reflectance	17	15	9
Visual kerogen microscopy	10	16	9,10
Isotope composition C <sub>15</sub> + fractions	4	17,18	11a-b
GC IRMS of saturated hydrocarbons	1	19a-c	12a-d
GC - MS of saturated and aromatic hydrocarbons	4	20a-h	13a-i



Table 1a: C1 to C7 hydrocarbons in HEADSPACE gas  
(µl gas/kg rock)

Project: NOCS 25/8-7

Well: NOCS 25/8-7

Depth unit of measure: m \* Indicated values in ml gas/kg rock

Depth	C1	C2	C3	iC4	nC4	C5+	sum C1-C4	sum C2-C4	%wet ness	iC4 --- nC4
1120.00	3222	2	2	-	-	1	3226	4	0.1	-
1160.00	2758	2	3	-	-	1	2763	5	0.2	-
1200.00	460	1	2	-	-	2	463	3	0.7	-
1240.00	29	-	2	-	-	1	31	2	6.5	-
1280.00	1642	1	1	-	-	1	1644	2	0.1	-
1320.00	-	-	-	-	-	-	-	-	-	-
1360.00	2224	1	1	-	-	-	2226	2	0.1	-
1400.00	1067	1	2	-	-	-	1070	3	0.3	-
1440.00	157	-	1	-	-	1	158	1	0.6	-
1480.00	123	-	1	-	-	2	124	1	0.8	-
1520.00	263	1	1	-	-	1	265	2	0.8	-
1560.00	739	16	4	1	-	5	760	21	2.8	-
1600.00	982	17	5	2	1	3	1007	25	2.5	2.00
1640.00	627	11	3	1	1	2	643	16	2.5	1.00
1680.00	1712	41	14	5	2	11	1774	62	3.5	2.50
1720.00	2092	99	17	5	2	9	2215	123	5.6	2.50
1760.00	2012	69	19	7	2	8	2109	97	4.6	3.50
1800.00	1273	51	19	7	3	10	1353	80	5.9	2.33
1840.00	1583	74	28	8	5	8	1698	115	6.8	1.60
1880.00	571	25	12	4	3	6	615	44	7.2	1.33
1920.00	1293	100	52	15	16	32	1476	183	12.4	0.94
1959.00	1621	138	67	16	20	48	1862	241	12.9	0.80
2001.00	2356	303	150	31	37	74	2877	521	18.1	0.84

Table 1a: C1 to C7 hydrocarbons in HEADSPACE gas  
( $\mu$ l gas/kg rock)

Project: NOCS 25/8-7

Well: NOCS 25/8-7

Depth unit of measure: m

\* Indicated values in ml gas/kg rock

Depth	C1	C2	C3	iC4	nC4	C5+	sum C1-C4	sum C2-C4	%wet ness	iC4 --- nC4
2010.00	1742	267	137	27	35	76	2208	466	21.1	0.77
2019.00	1892	261	157	29	40	76	2379	487	20.5	0.73
2028.00	5015	587	285	52	66	79	6005	990	16.5	0.79
2037.00	1574	188	116	24	29	32	1931	357	18.5	0.83
2046.00	2189	282	172	30	42	58	2715	526	19.4	0.71
2055.00	1714	216	167	36	54	76	2187	473	21.6	0.67
2064.00	39	13	15	4	7	12	78	39	50.0	0.57
2073.00	22	6	7	2	3	3	40	18	45.0	0.67
2082.00	1146	254	249	56	97	87	1802	656	36.4	0.58
2091.00	1677	293	278	64	105	82	2417	740	30.6	0.61
2100.00	954	166	175	41	71	59	1407	453	32.2	0.58
2109.00	1037	183	195	43	78	67	1536	499	32.5	0.55
2118.00	866	159	187	44	81	69	1337	471	35.2	0.54
2127.00	838	134	157	37	71	57	1237	399	32.3	0.52
2136.00	896	139	147	33	61	47	1276	380	29.8	0.54
2145.00	137	23	26	6	10	8	202	65	32.2	0.60
2154.00	1132	162	142	28	52	44	1516	384	25.3	0.54
2163.00	641	121	119	23	45	35	949	308	32.5	0.51
2172.00	974	161	167	39	67	46	1408	434	30.8	0.58
2181.00	906	194	163	30	56	48	1349	443	32.8	0.54
2190.00	1183	388	322	51	88	58	2032	849	41.8	0.58
2199.00	1222	414	334	51	84	64	2105	883	42.0	0.61
2208.00	389	126	115	20	35	27	685	296	43.2	0.57

Table 1a: C1 to C7 hydrocarbons in HEADSPACE gas  
( $\mu$ l gas/kg rock)

Project: NOCS 25/8-7

Well: NOCS 25/8-7

Depth unit of measure: m \* Indicated values in ml gas/kg rock

Depth	C1	C2	C3	iC4	nC4	C5+	sum C1-C4	sum C2-C4	%wet ness	iC4 --- nC4
1220.00	209	56	58	11	20	20	354	145	41.0	0.55
1230.00	182	45	57	12	25	29	321	139	43.3	0.48
1240.00	152	38	47	10	21	26	268	116	43.3	0.48
1250.00	194	59	66	15	24	29	358	164	45.8	0.63
1260.00	158	53	58	13	19	25	301	143	47.5	0.68
1270.00	255	98	106	24	32	47	515	260	50.5	0.75
1280.00	474	151	159	34	46	87	864	390	45.1	0.74
1290.00	9539	2468	1037	147	117	214	13308	3769	28.3	1.26
1300.00	23944	5473	1946	262	166	203	31791	7847	24.7	1.58
1309.00	12408	4396	2037	288	205	266	19334	6926	35.8	1.40
1318.00	13018	4122	1977	297	217	305	19631	6613	33.7	1.37
1327.00	2693	965	580	83	76	111	4397	1704	38.8	1.09
1336.00	31583	7289	2869	453	248	335	42442	10859	25.6	1.83
1345.00	5741	1600	762	95	81	116	8279	2538	30.7	1.17
1354.00	3590	1168	630	87	77	122	5552	1962	35.3	1.13
1363.00	3086	970	569	90	82	147	4797	1711	35.7	1.10
1372.00	2961	1109	656	99	83	146	4908	1947	39.7	1.19
1381.00	2122	746	421	70	57	86	3416	1294	37.9	1.23

Table 1b: C1 to C7 hydrocarbons in CUTTINGS gas  
( $\mu$ l gas/kg rock)

Project: NOCS 25/8-7

Well: NOCS 25/8-7

Depth unit of measure: m

\* Indicated values in ml gas/kg source rock

Depth	C1	C2	C3	iC4	nC4	C5+	sum C1-C4	sum C2-C4	%wet ness	iC4 nC4
1120.00	33	-	-	-	-	1	33	-	-	-
1160.00	77	9	13	-	2	11	101	24	23.8	-
1200.00	37	7	10	-	1	10	55	18	32.7	-
1240.00	18	3	7	-	1	4	29	11	37.9	-
1280.00	60	4	5	-	1	5	70	10	14.3	-
1320.00	33	5	5	-	1	6	44	11	25.0	-
1360.00	24	5	4	-	1	4	34	10	29.4	-
1400.00	16	2	3	-	-	7	21	5	23.8	-
1440.00	9	1	1	-	-	5	11	2	18.2	-
1480.00	7	3	-	-	-	5	10	3	30.0	-
1520.00	10	2	2	-	-	3	14	4	28.6	-
1560.00	16	2	2	-	-	8	20	4	20.0	-
1600.00	14	2	2	-	1	8	19	5	26.3	-
1640.00	14	2	2	-	1	10	19	5	26.3	-
1680.00	15	3	3	1	1	17	23	8	34.8	1.00
1720.00	23	4	5	3	2	23	37	14	37.8	1.50
1760.00	28	5	6	3	2	25	44	16	36.4	1.50
1800.00	36	7	8	5	3	30	59	23	39.0	1.67
1840.00	26	6	9	5	5	26	51	25	49.0	1.00
1880.00	25	5	6	2	4	29	42	17	40.5	0.50
1920.00	27	10	20	10	18	118	85	58	68.2	0.56
1959.00	44	25	45	18	35	205	167	123	73.7	0.51
2001.00	52	42	76	27	52	245	249	197	79.1	0.52

Table 1b: C1 to C7 hydrocarbons in CUTTINGS gas  
( $\mu$ l gas/kg rock)

Project: NOCS 25/8-7

Well: NOCS 25/8-7

Depth unit of measure: m

\* Indicated values in ml gas/kg source rock

Depth	C1	C2	C3	iC4	nC4	C5+	sum C1-C4	sum C2-C4	%wet ness	iC4 --- nC4
2010.00	37	25	58	24	47	312	191	154	80.6	0.51
2019.00	14	17	49	21	38	182	139	125	89.9	0.55
2028.00	26	23	48	15	31	106	143	117	81.8	0.48
2037.00	54	42	92	28	63	194	279	225	80.7	0.44
2046.00	18	9	18	5	14	46	64	46	71.9	0.36
2055.00	11	4	9	3	8	34	35	24	68.6	0.38
2064.00	5	1	3	1	4	38	14	9	64.3	0.25
2073.00	17	6	16	6	19	76	64	47	73.4	0.32
2082.00	42	29	96	34	104	240	305	263	86.2	0.33
2091.00	51	29	83	27	83	197	273	222	81.3	0.33
2100.00	32	16	41	14	43	108	146	114	78.1	0.33
2109.00	42	19	52	18	55	132	186	144	77.4	0.33
2118.00	20	8	24	8	28	71	88	68	77.3	0.29
2127.00	17	7	22	8	27	70	81	64	79.0	0.30
2136.00	17	7	20	8	24	52	76	59	77.6	0.33
2145.00	17	9	26	9	28	57	89	72	80.9	0.32
2154.00	23	11	33	12	37	77	116	93	80.2	0.32
2163.00	12	7	22	7	24	52	72	60	83.3	0.29
2172.00	29	14	39	14	46	102	142	113	79.6	0.30
2181.00	45	35	101	31	87	155	299	254	85.0	0.36
2190.00	60	86	266	79	190	243	681	621	91.2	0.42
2199.00	76	74	237	80	206	311	673	597	88.7	0.39
2208.00	39	14	45	14	47	85	159	120	75.5	0.30

Table 1b: C1 to C7 hydrocarbons in CUTTINGS gas  
( $\mu$ l gas/kg rock)

Project: NOCS 25/8-7

Well: NOCS 25/8-7

Depth unit of measure: m

\* Indicated values in ml gas/kg source rock

Depth	C1	C2	C3	iC4	nC4	C5+	sum C1-C4	sum C2-C4	%wet ness	iC4 --- nC4
2220.00	46	12	19	6	21	46	104	58	55.8	0.29
2230.00	37	8	9	3	10	42	67	30	44.8	0.30
2240.00	50	10	8	2	6	35	76	26	34.2	0.33
2250.00	46	11	12	4	11	44	84	38	45.2	0.36
2260.00	18	4	5	2	5	23	34	16	47.1	0.40
2270.00	126	38	33	8	15	51	220	94	42.7	0.53
2280.00	36	9	12	4	9	37	70	34	48.6	0.44
2290.00	127	221	327	84	88	236	847	720	85.0	0.95
2300.00	1322	2051	1916	390	340	596	6019	4697	78.0	1.15
2309.00	259	571	852	200	199	401	2081	1822	87.6	1.01
2318.00	194	431	579	118	126	206	1448	1254	86.6	0.94
2327.00	86	187	334	76	99	218	782	696	89.0	0.77
2336.00	1253	2086	1580	254	240	375	5413	4160	76.9	1.06
2345.00	247	513	672	133	155	301	1720	1473	85.6	0.86
2354.00	124	210	354	83	108	295	879	755	85.9	0.77
2363.00	87	136	247	62	78	230	610	523	85.7	0.79
2372.00	40	73	159	44	56	175	372	332	89.3	0.79
2381.00	77	124	238	63	78	230	580	503	86.7	0.81

Table 1c: C1 to C7 hydrocarbons in HEADSPACE and CUTTINGS gas  
( $\mu$ l gas/kg rock)

Project: NOCS 25/8-7

Well: NOCS 25/8-7

Depth unit of measure: m

\* Indicated values in ml gas/kg source rock

Depth	C1	C2	C3	iC4	nC4	C5+	sum C1-C4	sum C2-C4	%wet ness	iC4 --- nC4
1120.00	3255	2	2	-	-	2	3259	4	0.1	-
1160.00	2835	11	16	-	2	12	2864	29	1.0	-
1200.00	497	8	12	-	1	12	518	21	4.1	-
1240.00	47	3	9	-	1	5	60	13	21.7	-
1280.00	1702	5	6	-	1	6	1714	12	0.7	-
1320.00	33	5	5	-	1	6	44	11	25.0	-
1360.00	2248	6	5	-	1	4	2260	12	0.5	-
1400.00	1083	3	5	-	-	7	1091	8	0.7	-
1440.00	166	1	2	-	-	6	169	3	1.8	-
1480.00	130	3	1	-	-	7	134	4	3.0	-
1520.00	273	3	3	-	-	4	279	6	2.2	-
1560.00	755	18	6	1	-	13	780	25	3.2	-
1600.00	996	19	7	2	2	11	1026	30	2.9	1.00
1640.00	641	13	5	1	2	12	662	21	3.2	0.50
1680.00	1727	44	17	6	3	28	1797	70	3.9	2.00
1720.00	2115	103	22	8	4	32	2252	137	6.1	2.00
1760.00	2040	74	25	10	4	33	2153	113	5.3	2.50
1800.00	1309	58	27	12	6	40	1412	103	7.3	2.00
1840.00	1609	80	37	13	10	34	1749	140	8.0	1.30
1880.00	596	30	18	6	7	35	657	61	9.3	0.86
1920.00	1320	110	72	25	34	150	1561	241	15.4	0.74
1959.00	1665	163	112	34	55	253	2029	364	17.9	0.62

Table 1c: C1 to C7 hydrocarbons in HEADSPACE and CUTTINGS gas  
( $\mu$ l gas/kg rock)

Project: NOCS 25/8-7

Well: NOCS 25/8-7

Depth unit of measure: m

\* Indicated values in ml gas/kg source rock

Depth	C1	C2	C3	iC4	nC4	C5+	sum C1-C4	sum C2-C4	%wet ness	iC4 --- nC4
2001.00	2408	345	226	58	89	319	3126	718	23.0	0.65
2010.00	1779	292	195	51	82	388	2399	620	25.8	0.62
2019.00	1906	278	206	50	78	258	2518	612	24.3	0.64
2028.00	5041	610	333	67	97	185	6148	1107	18.0	0.69
2037.00	1628	230	208	52	92	226	2210	582	26.3	0.57
2046.00	2207	291	190	35	56	104	2779	572	20.6	0.63
2055.00	1725	220	176	39	62	110	2222	497	22.4	0.63
2064.00	44	14	18	5	11	50	92	48	52.2	0.45
2073.00	39	12	23	8	22	79	104	65	62.5	0.36
2082.00	1188	283	345	90	201	327	2107	919	43.6	0.45
2091.00	1728	322	361	91	188	279	2690	962	35.8	0.48
2100.00	986	182	216	55	114	167	1553	567	36.5	0.48
2109.00	1079	202	247	61	133	199	1722	643	37.3	0.46
2118.00	886	167	211	52	109	140	1425	539	37.8	0.48
2127.00	855	141	179	45	98	127	1318	463	35.1	0.46
2136.00	913	146	167	41	85	99	1352	439	32.5	0.48
2145.00	154	32	52	15	38	65	291	137	47.1	0.39
2154.00	1155	173	175	40	89	121	1632	477	29.2	0.45
2163.00	653	128	141	30	69	87	1021	368	36.0	0.43
2172.00	1003	175	206	53	113	148	1550	547	35.3	0.47
2181.00	951	229	264	61	143	203	1648	697	42.3	0.43
2190.00	1243	474	588	130	278	301	2713	1470	54.2	0.47



Table 1c: C1 to C7 hydrocarbons in HEADSPACE and CUTTINGS gas  
( $\mu$ l gas/kg rock)

Project: NOCS 25/8-7

Well: NOCS 25/8-7

Depth unit of measure: m \* Indicated values in ml gas/kg source rock

Depth	C1	C2	C3	iC4	nC4	C5+	sum C1-C4	sum C2-C4	%wet ness	iC4 --- nC4
2199.00	1298	488	571	131	290	375	2778	1480	53.3	0.45
2208.00	428	140	160	34	82	112	844	416	49.3	0.41
2220.00	255	68	77	17	41	66	458	203	44.3	0.41
2230.00	219	53	66	15	35	71	388	169	43.6	0.43
2240.00	202	48	55	12	27	61	344	142	41.3	0.44
2250.00	240	70	78	19	35	73	442	202	45.7	0.54
2260.00	176	57	63	15	24	48	335	159	47.5	0.63
2270.00	381	136	139	32	47	98	735	354	48.2	0.68
2280.00	510	160	171	38	55	124	934	424	45.4	0.69
2290.00	9666	2689	1364	231	205	450	14155	4489	31.7	1.13
2300.00	25266	7524	3862	652	506	799	37810	12544	33.2	1.29
2309.00	12667	4967	2889	488	404	667	21415	8748	40.9	1.21
2318.00	13212	4553	2556	415	343	511	21079	7867	37.3	1.21
2327.00	2779	1152	914	159	175	329	5179	2400	46.3	0.91
2336.00	32836	9375	4449	707	488	710	47855	15019	31.4	1.45
2345.00	5988	2113	1434	228	236	417	9999	4011	40.1	0.97
2354.00	3714	1378	984	170	185	417	6431	2717	42.3	0.92
2363.00	3173	1106	816	152	160	377	5407	2234	41.3	0.95
2372.00	3001	1182	815	143	139	321	5280	2279	43.2	1.03
2381.00	2199	870	659	133	135	316	3996	1797	45.0	0.99

Table 2: Isotope GC Analysis of Headspace Gas for well NOCS 25/8-7

Depth unit of measure: m

Depth	Typ	Lithology	C1	C2	C3	iC4	nC4	CO2	D	Sample
2046.00	cut	Sh/Clst	-49.1	-29.6	-29.2	-	-29.8	-	-	0038-1L
2055.00	cut	Sh/Clst	-54.2	-30.2	-30.1	-30.3	-30.3	-	-	0039-1L
2064.00	cut	Sh/Clst	-32.3	-27.8	-29.9	-31.4	-30.4	-	-	0040-1L
2145.00	cut	Sh/Clst	-48.2	-29.8	-29.2	-28.6	-28.7	-12.7	-	0049-1L
2154.00	cut	Sh/Clst	-50.5	-30.9	-30.0	-29.5	-29.7	-22.6	-	0050-1L
2163.00	cut	Sh/Clst	-49.6	-31.1	-30.2	-29.9	-29.9	-22.6	-	0051-1L
2172.00	cut	Sh/Clst	-49.2	-30.7	-29.6	-29.3	-29.4	-22.6	-	0052-1L
2190.00	cut	S/Sst	-50.0	-31.3	-30.2	-28.8	-29.2	-21.1	-	0054-3L
2208.00	cut	S/Sst	-47.7	-30.8	-29.9	-29.5	-29.5	-25.4	-	0056-3L
2318.00	cut	S/Sst	-48.0	-31.7	-31.2	-29.9	-31.5	-22.1	-	0067-5L
2336.00	cut	S/Sst	-48.8	-32.5	-31.5	-31.3	-33.5	-	-	0069-5L

Table 3 : Lithology description for well NOCS 25/8-7

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
1120.00						0011
			80	S/Sst : brn gy, slt, glauc		0011-3L
			20	Cont : cem		0011-1L
			tr	Cont : prp, fib		0011-2L
1160.00						0012
			100	Slstst : brn gy, s		0012-2L
			tr	Cont : prp, dd, fib		0012-1L
1200.00						0013
			100	Slstst : brn gy, s		0013-2L
			tr	Cont : prp, dd, fib		0013-1L
			tr	S/Sst : w, cem, l		0013-3L
1240.00						0014
			95	Slstst : brn gy, s		0014-2L
			5	Ca : ol gy		0014-4L
			tr	Cont : fib		0014-1L
			tr	S/Sst : w, cem, l		0014-3L
1280.00						0015
			100	Slstst : brn gy, s		0015-2L
			tr	Cont : prp		0015-1L
			tr	S/Sst : w, cem, l		0015-3L
			tr	Ca : ol gy		0015-4L

Table 3 : Lithology description for well NOCS 25/8-7

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample	
Interval	TOC%	%	Lithology description				
1320.00						0016	
		100	S/Sst	: w, l		0016-3L	
			tr Cont	: prp		0016-1L	
			tr Sltst	: brn gy, s		0016-2L	
			tr Ca	: ol gy		0016-4L	
1360.00						0017	
		95	Sh/Clst:	brn gy, slt		0017-2L	
		5	S/Sst	: w, l		0017-3L	
			tr Cont	: prp		0017-1L	
			tr Sh/Clst:	gn gy to lt gy		0017-4L	
1400.00						0018	
		50	Sh/Clst:	brn gy, slt		0018-2L	
		45	Sh/Clst:	gn gy to m gy		0018-4L	
		5	S/Sst	: w, l		0018-3L	
			tr Cont	: prp		0018-1L	
1440.00						0019	
		65	Sh/Clst:	gn gy to m gy		0019-4L	
		35	Sh/Clst:	brn gy, slt, s		0019-2L	
			tr Cont	: fib		0019-1L	
			tr S/Sst	: w, l		0019-3L	
1480.00						0020	
		85	Sh/Clst:	brn gy to dsk brn		0020-2L	
		15	Sh/Clst:	gn gy to m gy		0020-3L	
			tr Cont	: prp		0020-1L	
			tr Ca	: lt or		0020-4L	

Table 3 : Lithology description for well NOCS 25/8-7

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
1520.00						0021
	0.95	95		Sh/Clst: brn gy to dsk brn		0021-2L
		5		Sh/Clst: gn gy to m gy		0021-3L
				tr Cont : prp		0021-1L
				tr Ca : lt or		0021-4L
1560.00						0022
		100		Sh/Clst: brn gy to m gy		0022-1L
				tr Ca : lt or		0022-2L
1600.00						0023
		100		Sh/Clst: brn gy to m gy		0023-1L
				tr Ca : lt or		0023-2L
1640.00						0024
		100		Sh/Clst: brn gy to m gy		0024-1L
				tr Ca : lt or		0024-2L
1680.00						0025
		100		Sh/Clst: brn gy to m gy to lt gy		0025-1L
				tr Ca : lt or		0025-2L
1720.00						0026
		100		Sh/Clst: brn gy to m gy to lt gy, slt		0026-1L
				tr Ca : lt or		0026-2L

Table 3 : Lithology description for well NOCS 25/8-7

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample	
Int Cvd	TOC%	%	Lithology description				
1760.00						0027	
	0.87	100	Sh/Clst: brn gy to m gy to lt gy, slt tr Ca : lt or			0027-1L 0027-2L	
1800.00						0028	
		100	Sh/Clst: brn gy to m gy to lt gy to gn gy tr Ca : lt or			0028-1L 0028-2L	
1840.00						0029	
		100	Sh/Clst: brn gy to m gy to lt gy to gn gy, slt tr Cont : prp			0029-1L 0029-2L	
1880.00						0030	
		50	Sh/Clst: brn gy, slt			0030-1L	
		50	Sh/Clst: lt gy to m gy to gn gy			0030-3L	
			tr Cont : prp			0030-2L	
			tr Ca : ol gy			0030-4L	
1920.00						0031	
	1.09	75	Sh/Clst: brn gy to m gy			0031-1L	
		15	Sh/Clst: lt gy to gn gy			0031-3L	
		10	Volc : lt gy to ol gy			0031-4L	
			tr Cont : prp			0031-2L	
1959.00						0032	
		60	Sh/Clst: brn gy to m gy to lt ol gy			0032-1L	
		30	Volc : lt gy to ol gy			0032-4L	
		10	Sh/Clst: lt gy to gn gy			0032-3L	
			tr Cont : prp			0032-2L	

Table 3 : Lithology description for well NOCS 25/8-7

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2001.00						0033
				95 Sh/Clst: lt gy to m gy to brn gy		0033-1L
				5 Volc : lt gy to ol gy		0033-4L
				tr Cont : prp		0033-2L
				tr Sh/Clst: gn gy		0033-3L
				tr Ca : ol gy		0033-5L
2010.00						0034
	1.14	100		Sh/Clst: lt gy to m gy to brn gy to lt ol gy, slt		0034-1L
				tr Cont : prp		0034-2L
				tr Sh/Clst: gn gy		0034-3L
				tr Ca : ol gy		0034-4L
2019.00						0035
	1.21	95		Sh/Clst: lt gy to m gy to brn gy to lt ol gy		0035-1L
				5 Cont : cem		0035-4L
				tr Cont : prp		0035-2L
				tr Ca : ol gy		0035-3L
2028.00						0036
	1.34	100		Sh/Clst: lt gy to m gy to brn gy to lt ol gy		0036-1L
				tr Cont : prp		0036-2L
				tr Ca : ol gy		0036-3L
				tr Cont : cem		0036-4L
2037.00						0037
	1.27	100		Sh/Clst: m gy to brn gy		0037-1L
				tr Cont : prp		0037-2L
				tr Ca : ol gy		0037-3L
				tr Cont : cem		0037-4L

Table 3 : Lithology description for well NOCS 25/8-7

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2046.00						0038
		0.74	95	Sh/Clst: lt gy to gn gy, m gy to brn gy		0038-1L
			5	Ca : pl y brn		0038-3L
				tr Cont : prp		0038-2L
				tr Cont : cem		0038-4L
2048.50	swc					0001
		0.26	100	Sh/Clst: m gy		0001-1L
2053.00	swc					0002
		0.88	100	Sh/Clst: gn gy		0002-1L
				tr S/Sst : w		0002-2L
2053.07	ccp					0075
		0.20	80	S/Sst : m gy, cem		0075-1L
			20	Sh/Clst: m gy		0075-2L
2053.19	ccp					0076
		0.39	95	S/Sst : m gy, cem		0076-1L
			5	Sh/Clst: m gy		0076-2L
2053.30	ccp					0077
		0.84	100	Sltst : lt gy to m gy, s, lam		0077-1L
2053.58	ccp					0078
		0.25	90	S/Sst : m gy, cem		0078-1L
			10	Sh/Clst: m gy		0078-2L



Table 3 : Lithology description for well NOCS 25/8-7

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample	
Int Cvd	TOC%	%	Lithology description				
2054.50	swc					0003	
	0.29	100	Sh/Clst: m gy			0003-1L	
2054.54	ccp					0079	
	0.91	70	S/Sst : m gy, cem			0079-1L	
		30	Sh/Clst: m gy			0079-2L	
2055.00						0039	
		100	Sh/Clst: lt gy to gn gy, m gy to brn gy			0039-1L	
			tr Cont : prp			0039-2L	
			tr Ca : pl y brn			0039-3L	
			tr Cont : cem			0039-4L	
			tr S/Sst : lt gy, cem			0039-5L	
2055.00	ccp					0080	
	0.38	100	S/Sst : m gy, cem, slt			0080-1L	
2061.45	ccp					0081	
	0.28	100	S/Sst : lt gy, l, cem			0081-1L	
2064.00						0040	
		80	Sh/Clst: lt gy to gn gy, m gy to brn gy, slt			0040-1L	
		20	Cont : prp			0040-2L	
			tr Ca : pl y brn			0040-3L	
			tr Cont : cem			0040-4L	
			tr S/Sst : lt gy, cem			0040-5L	

Table 3 : Lithology description for well NOCS 25/8-7

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2067.00	swc					0004
	0.64	100		Sh/Clst: m gy to drk gy tr S/Sst : w		0004-1L 0004-2L
2073.00						0041
				50 Sh/Clst: lt gy to gn gy 30 Cont : prp 20 Sh/Clst: m gy to brn gy to gy red tr Ca : ol gy tr S/Sst : w to lt gy to brn gy, cem		0041-4L 0041-2L 0041-1L 0041-3L 0041-5L
2082.00						0042
	0.77			50 S/Sst : w to lt gy to brn gy, crs, l, cem 30 Sh/Clst: lt gy to gn gy 10 Sh/Clst: m gy to brn gy to gy red 10 Cont : prp		0042-4L 0042-3L 0042-1L 0042-2L
2091.00						0043
	0.41			50 S/Sst : w to lt gy to brn gy, crs, l, cem 25 Sh/Clst: lt gy to gn gy 15 Sh/Clst: m gy to brn gy to gy red 10 Cont : prp		0043-4L 0043-3L 0043-1L 0043-2L
2097.00	swc					0005
	0.14	100		S/Sst : lt gy to brn gy		0005-2L
2100.00						0044
	0.13			50 S/Sst : w to lt gy to brn gy, crs, l, cem 20 Sh/Clst: m gy to brn gy, slt 20 Sh/Clst: lt gy to gn gy 10 Cont : prp		0044-4L 0044-1L 0044-3L 0044-2L

Table 3 : Lithology description for well NOCS 25/8-7

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample	
Int Cvd	TOC%	%	Lithology description				
2109.00						0045	
	0.08	40	S/Sst	: w to lt gy to brn gy, crs, l, cem		0045-4L	
		25	Sh/Clst	: m gy to brn, lt red, slt		0045-1L	
		25	Sh/Clst	: lt gy to gn gy		0045-3L	
		10	Cont	: prp		0045-2L	
2118.00						0046	
		50	Sh/Clst	: m gy to brn, lt red, slt		0046-1L	
		40	Sh/Clst	: lt gy to gn gy		0046-3L	
		5	Cont	: prp		0046-2L	
		5	S/Sst	: w to lt gy to brn gy, l		0046-4L	
2127.00						0047	
		45	Sh/Clst	: m gy to brn, lt red, slt		0047-1L	
		45	Sh/Clst	: lt gy to gn gy		0047-3L	
		5	Cont	: prp		0047-2L	
		5	S/Sst	: w to lt gy to brn gy, cem, l		0047-4L	
2136.00						0048	
		85	Sh/Clst	: lt gy to gn gy to m gy, brn gy to gy red		0048-1L	
	0.05	15	S/Sst	: w to lt gy to brn gy, cem, l		0048-3L	
		tr	Cont	: prp		0048-2L	
2145.00						0049	
		95	Sh/Clst	: lt gy to gn gy to m gy, brn gy to gy red		0049-1L	
		5	S/Sst	: w to lt gy to brn gy, cem, l		0049-3L	
		tr	Cont	: prp		0049-2L	

Table 3 : Lithology description for well NOCS 25/8-7

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2154.00						0050
		0.12	55	Sh/Clst: lt gy to gn gy to m gy, brn gy to gy red		0050-1L
			45	S/Sst : w to lt gy to brn gy, cem, l		0050-3L
				tr Cont : prp		0050-2L
2163.00						0051
			80	S/Sst : w to lt gy to brn gy, cem, l		0051-3L
			15	Sh/Clst: lt gy to gn gy to m gy		0051-1L
			5	Cont : prp		0051-2L
2172.00						0052
			75	S/Sst : w to lt gy, crs, l		0052-3L
			25	Sh/Clst: lt gy to gn gy to m gy, brn gy to gy red		0052-1L
				tr Cont : prp		0052-2L
2181.00						0053
		0.08	80	S/Sst : w to lt gy, crs, l		0053-3L
			20	Sh/Clst: lt gy to gn gy to m gy, brn gy to gy red		0053-1L
				tr Cont : prp		0053-2L
2187.50	swc					0006
		0.66	70	Sltst : brn gy to dsk brn		0006-1L
			30	S/Sst : w, l, sft		0006-2L

Table 3 : Lithology description for well NOCS 25/8-7

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2190.00						0054
				90 S/Sst : w to lt gy, crs, cem, l		0054-3L
				10 Sh/Clst: lt gy to gn gy to m gy, brn gy to gy red		0054-1L
				tr Cont : prp		0054-2L
2197.50	swc					0007
	0.12	100		S/Sst : w to brn gy, l, sft		0007-1L
2199.00						0055
				85 S/Sst : w to lt gy, crs, l, kln		0055-3L
				15 Sh/Clst: lt gy to gn gy to m gy, brn gy to gy red		0055-1L
				tr Cont : prp		0055-2L
				tr Sltst : brn blk		0055-4L
2208.00						0056
	0.19	80		S/Sst : w to lt gy, calc, cem, slt, crs		0056-3L
		15		Sh/Clst: lt gy to gn gy to m gy, brn gy to gy red		0056-1L
		5		Ca : w, chk		0056-5L
				tr Cont : prp		0056-2L
				tr Sltst : brn blk		0056-4L
2220.00						0057
	0.10	90		Ca : w to lt gy, slt, s, chk		0057-4L
		10		Sh/Clst: lt gy to gn gy to m gy, brn gy to gy red		0057-1L
				tr Cont : prp		0057-2L
				tr S/Sst : w to lt gy, cem, calc		0057-3L

Table 3 : Lithology description for well NOCS 25/8-7

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2230.00						0058
	0.06	75	Ca	: w to lt gy, slt, s, chk		0058-4L
		20	Sh/Clst:	lt gy to gn gy to m gy, brn gy to gy red		0058-1L
		5	Cont	: prp		0058-2L
		tr	S/Sst	: w to lt gy, cem, calc		0058-3L
2240.00						0059
	0.12	80	Ca	: w to lt gy, slt, chk		0059-4L
		15	Sh/Clst:	lt gy to gn gy to m gy, brn gy to gy red		0059-1L
		5	Cont	: prp		0059-2L
		tr	S/Sst	: w to lt gy, cem, calc		0059-3L
2250.00						0060
	0.09	90	Ca	: w to lt gy, slt, chk		0060-4L
		10	Sh/Clst:	lt gy to gn gy to m gy, brn gy to gy red		0060-1L
		tr	Cont	: prp		0060-2L
		tr	S/Sst	: w to lt gy, cem, calc		0060-3L
2260.00						0061
	0.10	95	Ca	: w to lt gy, slt, chk, mrl		0061-4L
		5	Sh/Clst:	lt gy to gn gy to m gy, brn gy to gy red		0061-1L
		tr	Cont	: prp		0061-2L
		tr	S/Sst	: w to lt gy, cem, calc		0061-3L
2270.00						0062
	0.36	95	Marl	: lt gy to m gy, slt, chk		0062-4L
		5	Sh/Clst:	lt gy to gn gy to m gy, brn gy to gy red		0062-1L
		tr	Cont	: prp		0062-2L
		tr	S/Sst	: w to lt gy, cem, calc		0062-3L

Table 3 : Lithology description for well NOCS 25/8-7

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample	
Int Cvd	TOC%	%	Lithology description				
2280.00						0063	
	0.29	90	Marl	:	lt gy to m gy, slt, s	0063-4L	
		10	Sh/Clst:	:	lt gy to gn gy to m gy, brn gy to gy red	0063-1L	
			tr Cont	:	prp	0063-2L	
			tr S/Sst	:	w to lt gy, cem, calc	0063-3L	
2290.00						0064	
		45	Marl	:	lt gy to m gy, slt, s	0064-3L	
	7.91	35	Sltst	:	dsk brn to brn blk	0064-4L	
		15	Sh/Clst:	:	lt gy to gn gy to m gy, brn gy to gy red	0064-1L	
		5	Cont	:	prp	0064-2L	
2300.00						0065	
		80	Sltst	:	dsk brn to brn blk	0065-4L	
	6.91	10	Sh/Clst:	:	lt gy to gn gy to m gy, brn gy to gy red	0065-1L	
		10	Marl	:	lt gy to m gy, slt, s	0065-3L	
			tr Cont	:	prp	0065-2L	
2309.00						0066	
	0.71	65	Ca	:	lt gy to brn gy	0066-8L	
	6.75	30	Sltst	:	dsk brn to brn blk	0066-9L	
		5	Sh/Clst:	:	lt gy to gn gy to m gy, brn gy to gy red	0066-6L	
			tr Cont	:	prp	0066-7L	
2310.50	swc					0008	
	0.14	100	S/Sst	:	or gy, l, sft	0008-1L	

Table 3 : Lithology description for well NOCS 25/8-7

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2315.00	swc					0009
	0.46	100	S/Sst	: m y brn, l, sft		0009-1L
2318.00						0067
			50	S/Sst : w to lt gy, crs, l		0067-5L
			15	Cont : prp		0067-2L
			15	Sltst : dsk brn to brn blk		0067-4L
			10	Sh/Clst: lt gy to gn gy to m gy, brn gy to gy red		0067-1L
			10	Ca : lt gy to brn gy		0067-3L
2319.00	swc					0010
	0.11	100	S/Sst	: lt or to or gy, l, sft		0010-1L
2319.15	ccp					0082
	0.11	100	S/Sst	: lt brn gy, l, cem		0082-1L
2320.35	ccp					0083
	0.15	100	S/Sst	: brn gy, crs, cem, l		0083-1L
2323.00	ccp					0084
	0.13	90	S/Sst	: brn gy, crs, cem, l		0084-1L
		10	Coal	: blk		0084-2L
2327.00						0068
	6.81		60	Sltst : brn gy to gy brn		0068-6L
			25	Sh/Clst: lt gy to gn gy to m gy, brn gy to gy red		0068-1L
			10	Cont : prp		0068-2L
			5	S/Sst : w, l		0068-5L
			tr	Ca : lt gy to brn gy		0068-3L
			tr	Sltst : brn blk, carb		0068-4L



Table 3 : Lithology description for well NOCS 25/8-7

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2333.00	ccp					0085
	0.27	100	S/Sst	: lt gy to brn gy, Mica-ad, cem, l		0085-1L
2336.00						0069
	59.00		40 S/Sst	: w to lt gy, l		0069-5L
			35 Coal	: gy brn to brn blk, sft		0069-7L
			10 Sh/Clst	: lt gy to gn gy to m gy, brn gy to gy red		0069-1L
			10 Cont	: prp		0069-2L
			5 Sltst	: brn gy to gy brn		0069-6L
			tr Sltst	: brn blk, carb		0069-4L
2345.00						0070
	4.15		70 Sltst	: brn gy to gy brn		0070-5L
			15 Sh/Clst	: lt gy to gn gy to m gy		0070-1L
			10 Cont	: prp		0070-2L
			5 S/Sst	: w, l		0070-4L
			tr Coal	: blk		0070-3L
2354.00						0071
	0.45		50 Sh/Clst	: lt gy to gn gy to m gy		0071-1L
			35 Sh/Clst	: brn gy to gy brn, slt		0071-5L
			10 Ca	: or gy to pl y brn, dol		0071-6L
			5 Cont	: prp		0071-2L
			tr Sltst	: dsk brn		0071-3L
			tr S/Sst	: w, l		0071-4L
2363.00						0072
	0.54		50 Sh/Clst	: brn gy to gy brn, slt		0072-4L
			45 Sh/Clst	: lt gy to gn gy to m gy, gy red		0072-1L
			5 Ca	: or gy to pl y brn, dol		0072-5L
			tr Cont	: prp		0072-2L
			tr Sltst	: dsk brn		0072-3L

Table 3 : Lithology description for well NOCS 25/8-7

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2372.00						0073
	0.49			60 Sh/Clst: lt gy to gn gy to m gy, gy red		0073-1L
				35 Sh/Clst: brn gy to gy brn, slt		0073-4L
				5 Ca : w to brn gy, s, chk		0073-6L
				tr Cont : prp		0073-2L
				tr Sltst : dsk brn		0073-3L
				tr Ca : or gy to pl y brn, dol		0073-5L
2381.00						0074
	1.28			60 Sh/Clst: lt gy to gn gy to m gy, gy red		0074-1L
				20 Sh/Clst: brn gy to gy brn, slt		0074-4L
				15 Ca : w to brn gy, s, chk		0074-6L
				5 Cont : prp		0074-2L
				tr Sltst : dsk brn		0074-3L
				tr Ca : or gy to pl y brn, dol		0074-5L

Table 4 : Rock-Eval table for well NOCS 25/8-7

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
1520.00	cut	Sh/Clst: brn gy to dsk brn	0.64	3.68	1.69	2.18	0.95	387	178	4.3	0.15	356	0021-2L
1760.00	cut	Sh/Clst: brn gy to m gy to lt gy	0.37	3.01	1.68	1.79	0.87	346	193	3.4	0.11	359	0027-1L
1920.00	cut	Sh/Clst: brn gy to m gy	0.35	3.07	1.45	2.12	1.09	282	133	3.4	0.10	360	0031-1L
2010.00	cut	Sh/Clst: lt gy to m gy to brn gy to lt ol gy	0.30	2.90	1.12	2.59	1.14	254	98	3.2	0.09	430	0034-1L
2019.00	cut	Sh/Clst: lt gy to m gy to brn gy to lt ol gy	0.46	4.01	1.37	2.93	1.21	331	113	4.5	0.10	426	0035-1L
2028.00	cut	Sh/Clst: lt gy to m gy to brn gy to lt ol gy	0.27	3.35	1.19	2.82	1.34	250	89	3.6	0.07	430	0036-1L
2037.00	cut	Sh/Clst: m gy to brn gy	0.28	2.90	1.24	2.34	1.27	228	98	3.2	0.09	381	0037-1L
2046.00	cut	Sh/Clst: lt gy to gn gy, m gy to brn gy	0.25	1.68	1.16	1.45	0.74	227	157	1.9	0.13	365	0038-1L
2048.50	swc	Sh/Clst: m gy	0.19	0.84	0.70	1.20	0.26	323	269	1.0	0.18	351	0001-1L
2053.00	swc	Sh/Clst: gn gy	0.21	1.46	0.46	3.17	0.88	166	52	1.7	0.13	519	0002-1L
2053.07	ccp	S/Sst : m gy	0.01	0.24	0.01	24.00	0.20	120	5	0.3	0.04	468	0075-1L
2053.19	ccp	S/Sst : m gy	0.07	0.36	0.19	1.89	0.39	92	49	0.4	0.16	349	0076-1L
2053.30	ccp	Sltst : lt gy to m gy	0.13	0.70	0.19	3.68	0.84	83	23	0.8	0.16	427	0077-1L
2053.58	ccp	S/Sst : m gy	0.06	0.29	0.07	4.14	0.25	116	28	0.3	0.17	373	0078-1L

Table 4 : Rock-Eval table for well NOCS 25/8-7

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
2054.50	swc	Sh/Clst: m gy	0.04	0.32	0.31	1.03	0.29	110	107	0.4	0.11	352	0003-1L
2054.54	ccp	S/Sst : m gy	0.50	1.94	0.91	2.13	0.91	213	100	2.4	0.20	361	0079-1L
2055.00	ccp	S/Sst : m gy	0.39	1.10	0.72	1.53	0.38	289	189	1.5	0.26	355	0080-1L
2061.45	ccp	S/Sst : lt gy	0.10	0.39	0.29	1.34	0.28	139	104	0.5	0.20	352	0081-1L
2067.00	swc	Sh/Clst: m gy to drk gy	0.96	2.29	1.34	1.71	0.64	358	209	3.3	0.30	356	0004-1L
2082.00	cut	S/Sst : w to lt gy to brn gy	0.29	1.32	0.72	1.83	0.77	171	94	1.6	0.18	367	0042-4L
2091.00	cut	S/Sst : w to lt gy to brn gy	0.18	0.71	0.68	1.04	0.41	173	166	0.9	0.20	364	0043-4L
2097.00	swc	S/Sst : lt gy to brn gy	1.15	0.59	1.16	0.51	0.14	421	829	1.7	0.66	341	0005-2L
2100.00	cut	S/Sst : w to lt gy to brn gy	0.10	0.23	0.43	0.53	0.13	177	331	0.3	0.30	362	0044-4L
2109.00	cut	S/Sst : w to lt gy to brn gy	0.15	0.15	0.44	0.34	0.08	188	550	0.3	0.50	358	0045-4L
2118.00	com	bulk	0.34	1.69	1.16	1.46	0.45	376	258	2.0	0.17	360	0086-0B
2136.00	cut	S/Sst : w to lt gy to brn gy	0.05	0.05	0.32	0.16	0.05	100	640	0.1	0.50	355	0048-3L
2154.00	cut	S/Sst : w to lt gy to brn gy	0.08	0.16	0.49	0.33	0.12	133	408	0.2	0.33	361	0050-3L
2181.00	cut	S/Sst : w to lt gy	0.06	0.04	0.31	0.13	0.08	50	388	0.1	0.60	348	0053-3L
2187.50	swc	S/Sst : w	1.35	1.48	1.70	0.87	0.66	224	258	2.8	0.48	402	0006-2L
2197.50	swc	S/Sst : w to brn gy	1.21	0.45	1.28	0.35	0.12	375	1067	1.7	0.73	344	0007-1L

Table 4 : Rock-Eval table for well NOCS 25/8-7

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
2208.00	cut	S/Sst : w to lt gy	0.04	-	0.24	-	0.19	-	126	-	1.00	-	0056-3L
2220.00	cut	Ca : w to lt gy	0.14	0.50	0.92	0.54	0.10	500	920	0.6	0.22	365	0057-4L
2230.00	cut	Ca : w to lt gy	0.15	0.28	0.96	0.29	0.06	467	1600	0.4	0.35	354	0058-4L
2240.00	cut	Ca : w to lt gy	0.19	0.45	0.92	0.49	0.12	375	767	0.6	0.30	354	0059-4L
2250.00	cut	Ca : w to lt gy	0.13	0.23	0.89	0.26	0.09	256	989	0.4	0.36	352	0060-4L
2260.00	cut	Ca : w to lt gy	0.14	0.25	0.80	0.31	0.10	250	800	0.4	0.36	357	0061-4L
2270.00	cut	Marl : lt gy to m gy	0.17	1.00	1.15	0.87	0.36	278	319	1.2	0.15	368	0062-4L
2280.00	cut	Marl : lt gy to m gy	0.25	1.22	1.27	0.96	0.29	421	438	1.5	0.17	365	0063-4L
2290.00	cut	Sltst : dsk brn to brn blk	1.96	31.33	1.32	23.73	7.91	396	17	33.3	0.06	423	0064-4L
2300.00	cut	Sltst : dsk brn to brn blk	3.20	32.09	1.41	22.76	6.91	464	20	35.3	0.09	424	0065-4L
2309.00	cut	Ca : lt gy to brn gy	0.27	2.79	0.65	4.29	0.71	393	92	3.1	0.09	429	0066-8L
2309.00	cut	Sltst : dsk brn to brn blk	2.69	31.99	1.81	17.67	6.75	474	27	34.7	0.08	424	0066-9L
2310.50	swc	S/Sst : or gy	1.11	0.36	0.95	0.38	0.14	257	679	1.5	0.76	338	0008-1L
2315.00	swc	S/Sst : m y brn	1.70	1.13	1.28	0.88	0.46	246	278	2.8	0.60	385	0009-1L
2319.00	swc	S/Sst : lt or to or gy	0.75	0.60	1.02	0.59	0.11	545	927	1.4	0.56	591	0010-1L
2319.15	ccp	S/Sst : lt brn gy	0.63	1.65	0.95	1.74	0.11	1500	864	2.3	0.28	594	0082-1L

Table 4 : Rock-Eval table for well NOCS 25/8-7

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
2320.35	ccp	S/Sst : brn gy	0.43	0.26	0.72	0.36	0.15	173	480	0.7	0.62	512	0083-1L
2323.00	ccp	S/Sst : brn gy	0.18	0.56	0.45	1.24	0.13	431	346	0.7	0.24	591	0084-1L
2327.00	cut	Sltst : brn gy to gy brn	1.92	30.11	1.01	29.81	6.81	442	15	32.0	0.06	422	0068-6L
2333.00	ccp	S/Sst : lt gy to brn gy	0.19	1.17	0.38	3.08	0.27	433	141	1.4	0.14	494	0085-1L
2336.00	cut	Coal : gy brn to brn blk	39.35	167.58	12.90	12.99	59.00	284	22	206.9	0.19	426	0069-7L
2345.00	cut	Sltst : brn gy to gy brn	1.24	18.95	0.84	22.56	4.15	457	20	20.2	0.06	424	0070-5L
2354.00	cut	Ca : or gy to pl y brn	0.06	0.38	3.63	0.10	0.45	84	807	0.4	0.14	464	0071-6L
2363.00	cut	Sh/Clst: brn gy to gy brn	0.26	1.77	1.29	1.37	0.54	328	239	2.0	0.13	361	0072-4L
2372.00	cut	Sh/Clst: brn gy to gy brn	0.18	1.37	1.25	1.10	0.49	280	255	1.6	0.12	360	0073-4L
2381.00	cut	Sh/Clst: brn gy to gy brn	0.35	3.71	1.16	3.20	1.28	290	91	4.1	0.09	434	0074-4L

Table 5 : Pyrolysis GC Data (S2 peak) as Percentage of Total Area for Well NOCS 25/8-7

Depth unit of measure: m

Depth	Typ	Lithology	C1	C2-C5	C6-C14	C15+	S2 from Rock-Eval	Sample
2028.00	cut	Sh/Clst: lt gy to m gy to brn gy to lt ol gy	5.07	34.85	45.89	14.18	3.35	0036-1L
2048.50	swc	Sh/Clst: m gy	3.64	62.37	31.37	2.62	0.84	0001-1L
2053.30	ccp	Sltst : lt gy to m gy	20.52	42.50	32.78	4.20	0.70	0077-1L
2054.54	ccp	S/Sst : m gy	6.66	43.86	41.21	8.27	1.94	0079-1L
2061.45	ccp	S/Sst : lt gy	12.54	56.40	28.39	2.67	0.39	0081-1L
2067.00	swc	Sh/Clst: m gy to drk gy	3.51	51.36	42.12	3.00	2.29	0004-1L
2091.00	cut	S/Sst : w to lt gy to brn gy	7.68	56.40	33.64	2.28	0.71	0043-4L
2097.00	swc	S/Sst : lt gy to brn gy	20.41	37.19	39.03	3.36	0.59	0005-2L
2109.00	cut	S/Sst : w to lt gy to brn gy	5.29	49.76	41.72	3.23	0.15	0045-4L
2154.00	cut	S/Sst : w to lt gy to brn gy	5.66	57.91	33.26	3.17	0.16	0050-3L
2187.50	swc	S/Sst : w	6.61	23.82	54.94	14.62	1.48	0006-2L
2197.50	swc	S/Sst : w to brn gy	5.45	45.09	46.06	3.39	0.45	0007-1L
2240.00	cut	Ca : w to lt gy	6.31	47.32	44.12	2.36	0.45	0059-4L
2270.00	cut	Marl : lt gy to m gy	3.24	55.25	39.39	2.13	1.00	0062-4L
2290.00	cut	Sltst : dsk brn to brn blk	4.56	14.37	30.98	50.10	31.33	0064-4L

Table 5 : Pyrolysis GC Data (S2 peak) as Percentage of Total Area for Well NOCS 25/8-7

Depth unit of measure: m

Depth	Typ	Lithology	C1	C2-C5	C6-C14	C15+	S2 from Rock-Eval	Sample
2300.00	cut	Sltst : dsk brn to brn blk	4.34	16.03	31.21	48.42	32.09	0065-4L
2309.00	cut	Ca : lt gy to brn gy	2.82	15.75	34.84	46.58	2.79	0066-8L
2309.00	cut	Sltst : dsk brn to brn blk	11.01	9.03	28.71	51.25	31.99	0066-9L
2310.50	swc	S/Sst : or gy	5.96	45.86	44.58	3.60	0.36	0008-1L
2315.00	swc	S/Sst : m y brn	7.76	36.82	43.09	12.33	1.13	0009-1L
2319.00	swc	S/Sst : lt or to or gy	5.09	35.10	52.53	7.28	0.60	0010-1L
2319.15	ccp	S/Sst : lt brn gy	9.55	34.66	47.36	8.44	1.65	0082-1L
2320.35	ccp	S/Sst : brn gy	18.90	35.32	42.67	3.12	0.26	0083-1L
2323.00	ccp	S/Sst : brn gy	8.32	41.70	47.43	2.55	0.56	0084-1L
2333.00	ccp	S/Sst : lt gy to brn gy	10.83	37.21	48.95	3.00	1.17	0085-1L
2336.00	cut	Coal : gy brn to brn blk	8.75	11.60	21.11	58.54	167.58	0069-7L
2345.00	cut	Sltst : brn gy to gy brn	3.41	13.45	31.84	51.30	18.95	0070-5L
2381.00	cut	Sh/Clst: brn gy to gy brn	3.54	34.14	44.04	18.28	3.71	0074-4L